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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/674,357

10/01/2003

Sang-Kug Yi

P56912

3818

7590

05/31/2006

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EXAMINER

MARC, MCDIEUNEL

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/674,357

Applicant(s)

YI ET AL.

Examiner

McDieunel Marc

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/21/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-15 is/are allowed.
- 6) ☒ Claim(s) 1, 6, 9, 16-17 is/are rejected.
- 7) ☒ Claim(s) 2-5, 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-17 are presented for examination.
2. The rejection to claims 1-17 under 35 U.S.C. 102(b) as being anticipated by **Kuno** (U.S. Pat. No. 5,802,494) is withdrawn.
3. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 6, 9 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by **Thrum et al.** (Probabilistic Algorithm and the Interactive Museum Tour-Guide Robot Minerva, 2000).

As per claims 1 and 16, **Thrum et al.** teaches a museum robot having a system for controlling a home robot (see page 4, second paragraph), comprising: a remote supercomputer responsive to a user's command for controlling said home robot (see section 6.4, Web Interface),

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said user and said home robot being in a premises different from a location of said supercomputer (see section 6.4, Web Interface); a home gateway for providing a path of communication between said home robot and said supercomputer via a network external to said premises (see page 4, second paragraph); and said home robot being controlled to perform only in response to command result signals generated by said supercomputer, said command result signals being generated in response to said user's command (see fig. 2, and pages 4-5). With respect to claim 16, a method for operating a home robot using a supercomputer (see page 4, as described above), the method comprising steps of: receiving a voice command of a user at the home robot (see fig. 12 and section 6.2); converting the voice command into a digital voice command (section 6.2 covers that limitation); transmitting the digital voice command to the supercomputer through a home gateway (see page 4, second paragraph, particularly the network module); interpreting the digital voice command transmitted from the home robot through the home gateway at the supercomputer by voice recognition (see page 4, second paragraph as described above); generating a response message to the voice command (section 6.2 covers that limitation); synthesizing the response message into a synthesized voice message transmitting the synthesized voice message to the home robot through the home gateway (see col. 23, lines 49-63 as described above); and converting the synthesized voice message to produce an analog voice signal to generate an audible voice through a speaker (section 6.2 covers that limitation, bear in mind that a speaker being used for the sound).

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With respect to claim 6, **Thrum et al.** teaches a museum robot having path of communication between said home robot and said home gateway being a wireless local area network (WLAN) (see second 6.4, particularly Web Interface).

With respect to claim 7, **Thrum et al.** teaches a supercomputer comprising: a home gateway interface unit for receiving said user's command via said home gateway and said network; a control unit for extracting and interpreting one or more commands of the user and a status signal of the home robot from the user's commands received by the home gateway interface unit, said control unit generating a command response signal in response to each interpreted command and a status response signal in response to the status signal; and a service module unit responsive to each said command response signal for generating corresponding command result signals and responsive to said status response signal for generating corresponding status result signals, said command result signals and status result signals being transmitted to said home robot via said control unit and said home gateway interface unit over said network (see figs. 3-5 as described above).

With respect to claim 9, **Thrum et al.** teaches a museum robot wherein a supercomputer comprising an authentication unit for authenticating the home robot, when the home robot transmits information through the home gateway or requests a service to enable said supercomputer and said home robot to communicate with each other (this know features do not have patentable weight, since all operating system requesting the use of authentication of some form).

With respect to claim 17, said step of transmitting the digital voice command to the supercomputer through a home gateway comprising steps of: converting the digital voice

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command to a wireless local area network (WLAN) signal (see section 2, first paragraph in page 3-4); transmitting the wireless local area network (WLAN) signal to said home gateway from said home robot (see page 4, second paragraph, particularly the network module); and converting the wireless local area network (WLAN) signal to a form suitable for transmission over a communication network connected between said supercomputer and said home gateway (see section 6.4 as mentioned above).

***Allowable Subject Matter***

6. Claims 10-15 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fail to teach or fairly suggest a system for controlling a home robot further includes a robot information managing unit for managing a general history of the home robot such as registration information, operation information, accident information and residential position for operations of the control unit in combination with the other features of the claimed invention.

8. Claims 2 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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9. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fail to teach or fairly suggest with respect to claim 2, a wireless communication unit for converting the digital command signal into a wireless command signal and transmitting the wireless command signal to the supercomputer through said home gateway and said network, and for receiving a wireless command result signal from the supercomputer through the network and the home gateway, said wireless communication unit converting the wireless command result signal into a digital command result signal; with respect to claim 7, a service module unit responsive to each said command response signal for generating corresponding command result signals and responsive to said status response signal for generating corresponding status result signals, said command result signals and status result signals being transmitted to said home robot via said control unit and said home gateway interface unit over said network in combination with the other features of the claimed invention.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to McDieunel Marc whose telephone number is (571) 272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

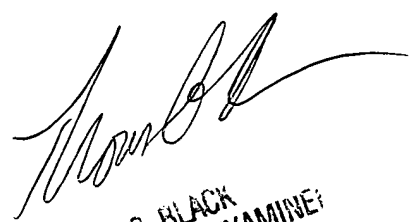
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Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
McDleunel Marc  
Examiner  
Art Unit 3661

Saturday, February 25, 2006

MM/

  
THOMAS G. BLACK  
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